

FIG. 1

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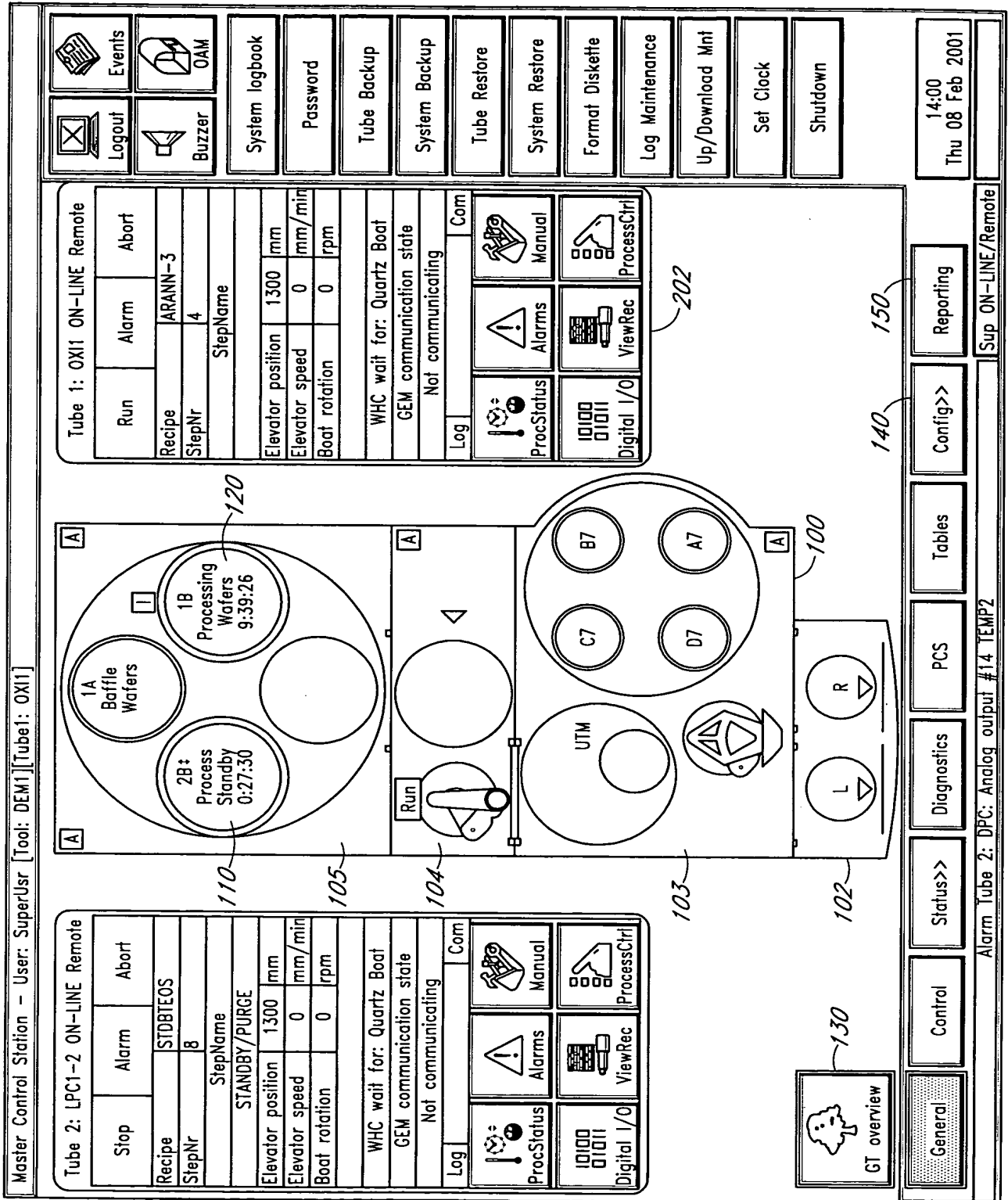


FIG. 2

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Report: Green Tool overview - [Tool: DEM1]

Start time: 2000-10-01 00:00:00 End time: 2000-11-01 23:59:59

Channel	Unit	T1: OX1	T2: LPC1-2	Σ		
Ar	SL	8182.59	-	8182.59		
DCS	SL	-	455.40	455.40		
Exhaust	M ³	11309540.24	11252595.11	22562135.35		
H2	SCC	8447.01	-	8447.01		
N2	SL	433219.72	1876721.98	2309941.70		
N2 Carousel	SL	354198.17	-	354198.17		
N2 Purge	SL	193544.55	6305.37	199849.92		
N2-Bubbl	SL	360.59	-	360.59		
NH3	SL	-	0.00	0.00		
NO	SL	259.55	-	259.55		
O2	SL	12991.83	-	12991.83		
PH3/N2	SCC	-	1391717.47	1391717.47		
Power	Kwh	53.87	41.28	95.15		
SiH4	SL	-	0.00	0.00		
Teos	SL	-	5613.88	5613.88		
Water	L	1945579.87	15893389.20	3534918.07		

Exit Filter Print Print Setup Export

Alarm Tube 2: WHC: BTM Arm: WHR door switch

FIG. 3

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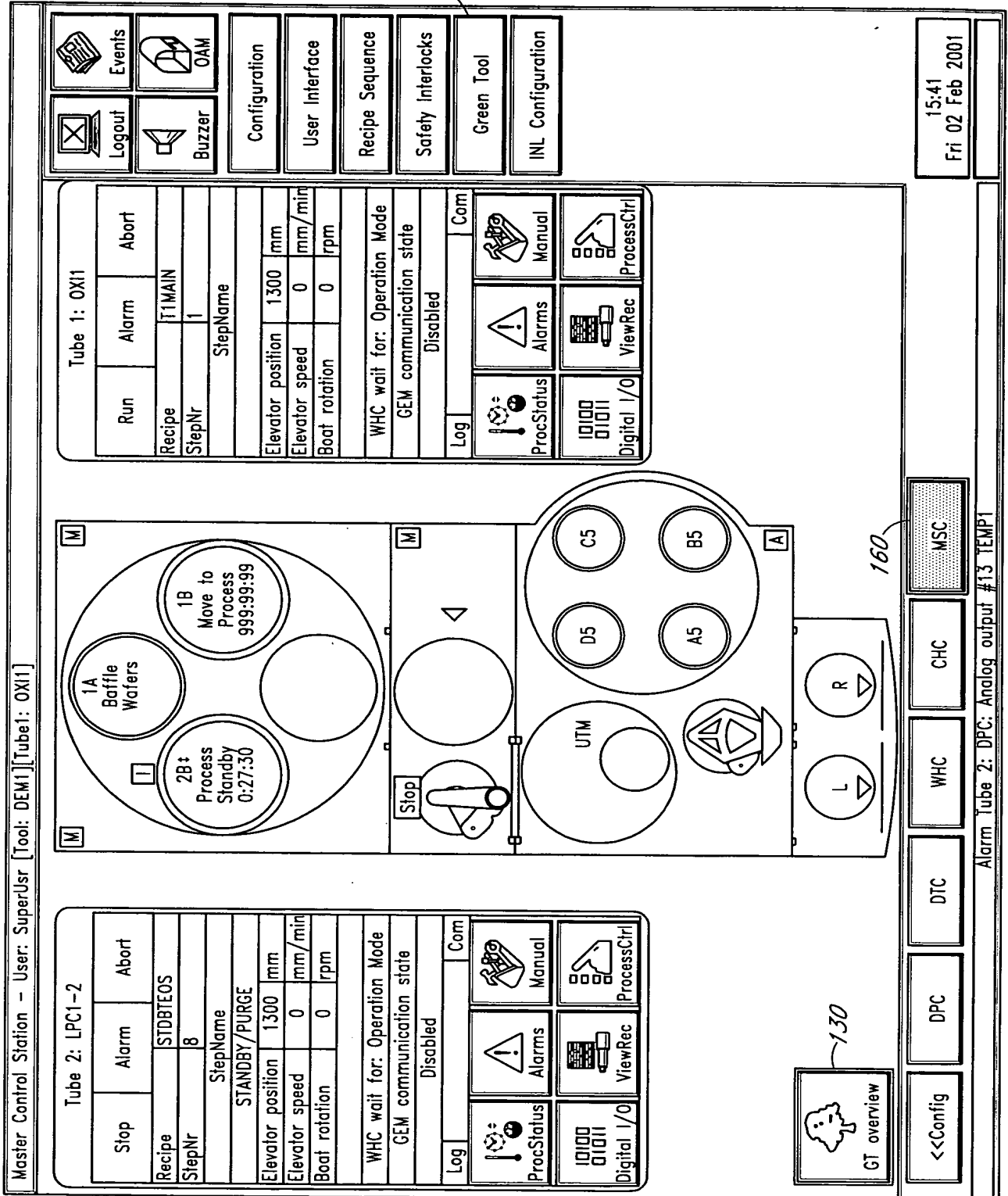


FIG. 4

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Green Tool Configuration editor - [Tool: DEM1]

Consumables

N2 (oxi1)

N2-Bubbl (oxi1)

N2 Carousel () [MANUAL EDIT]

O2 (oxi1)

NO (oxi1)

Ar (oxi1)

H2 (OXI1)

Exhaust (OXI1)

Water (OXI1)

N2 Purge (OXI1)

Power (OXI1)

N2 () [MANUAL EDIT]

SiH4 () [MANUAL EDIT]

NH3 () [MANUAL EDIT]

Edit

New

Delete

Print all Consumables

Save and Exit

Exit

Logout

Events

Buzzer

OAM

Configuration

User Interface

Recipe Sequence

Safety Interlocks

Green Tool

INL Configuration

<<Config

DPC

DTC

WHC

CHC

MSC

Alarm Tube 2: WHC: House vacuum

15:42

Fri 02 Feb 2001

FIG. 5

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Green Tool Configuration editor - [Tool: DEM1]

Consumable: 02

Source: ox1

Units: SL

measured per Minute

>>

I/O Channel	Correction	When	=	(and)	
A0 3: 02-High	>>		>>		>>
A0 4: 02-Low	/	1000	>>	1	>>
+	>>		>>		>>
+	>>		>>		>>
+	>>		>>		>>
+	>>		>>		>>
+	>>		>>		>>
+	>>		>>		>>
+	>>		>>		>>

OK

Cancel

<<Config

DPC

DTC

WHC

CHC

MSC

Alarm Tube 1: WHC: BTM Arm: WHR door switch

12:13
Fri 02 Feb 2001

Events

Logout

Buzzer

Configuration

User Interface

Recipe Sequence

Safety Interlocks

Green Tool

INL Configuration

FIG. 6

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Green Tool Configuration editor - [Tool: DEM1]

Consumable:	Power	Source	OXI1	Units	Kwh	measured per	Hour
I/O Channel	Correction	When	=	(and)			
Power zone: 1	>>	*	>>		6.327	>>	
Power zone: 2	>>	*	>>		28.319	>>	
Power zone: 3	>>	*	>>		28.92	>>	
Power zone: 4	>>	*	>>		10.283	>>	
Power zone: 5	>>	*	>>		13.283	>>	
Power zone: 6	>>	*	>>		4.964	>>	
	>>	/	>>		100	>>	
	>>		>>			>>	

OK Cancel

Alarm Tube 2: DPC; Analog output #13 TEMP1

12:12
Fri 02 Feb 2001

Events
Logout
OAM
Buzzer
Configuration
User Interface
Recipe Sequence
Safety Interlocks
Green Tool
INL Configuration

FIG. 7

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Master Control Station - User: SuperUsr [Tool: DEM1][Tubet: OX11]

Tube 2: LPC1-2

Stop	Alarm	Abort
Recipe	STDBTEOS	
StepNr	8	
StepName		
STANDBY/PURGE		
Elevator position	1300	mm
Elevator speed	0	mm/min
Boat rotation	0	rpm
WHC wait for: Quartz Boat		
GEM communication state		
Disabled		
Log	Com	
ProcStatus	Alarms	Manual
Digital I/O	ViewRec	ProcessCtrl

Tube 1: OX11

Run	Alarm	Abort
Recipe	T1MAIN	
StepNr	1	
StepName		
Elevator position		
1300 mm		
Elevator speed		
0 mm/min		
Boat rotation		
0 rpm		
WHC wait for: Quartz Boat		
GEM communication state		
Disabled		
Log	Com	
ProcStatus	Alarms	Manual
Digital I/O	ViewRec	ProcessCtrl

Tube 2: LPC1-2

1A
Baffle
Wafers

1B
Move to
Process
999:99:99

2B:
Process
Standby
0:27:30

Tube 1: OX11

D5

B5

A5

Tube 1: OX11

C5

B5

A5

Tube 2: LPC1-2

D5

B5

A5

Tube 2: LPC1-2

D5

B5

A5

Tube 1: OX11

C5

B5

A5

Tube 2: LPC1-2

D5

B5

A5

Tube 1: OX11

C5

B5

A5

Tube 2: LPC1-2

D5

B5

A5

Tube 1: OX11

C5

B5

A5

Tube 2: LPC1-2

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Tube 1: OX11

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Tube 1: OX11

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Tube 2: LPC1-2

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Report: Green Tool detail - [Tool: DEM1][Tubet: OX1]

Star

Time Stamp

Report Search Criteria

Quick select

This Day

This Week

This Month

Resolution select

Calendar week

Time Span

Start

Mon

Week

22

29

May

2000

End

Sun

Week

26

02

Jul

2000

00

00

00

23

59

59

Sample date:

Exit

Ok

Cancel

lock

FIG. 9

Alarm Tube 2: WHC: House vacuum

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Report: Green Tool detail - [Tool: DEM1][Tubel: OX1]

Start time: 200 Channels Selection

Time Stamp

Available channels

Nr of channels: 6

Selected channels

N2
N2 - Bubbl
N2 Carousel
O2
NO
Ar
H2
Exhaust
Water
N2 Purge
Power

Add to selection>>

Delete

Delete all

Ok

Cancel

Exit

Sample date:

Unmark Block

FIG. 10

Alarm Tube 2: WHC: House vacuum

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Report: Green Tool detail - [Tool: DEM1][Tubel: OX11]

Start time: [2000-05-29 00:00:00] End time: [2000-07-02 23:59:59]

Time Stamp	N2 SL	N2 Carousel SL	Ar SL	H2 Burge SL	Power kWh	N2 SL
Wk22 2000-05-29	0.00	192433.27	95.20	46078.92	7.96	98484.68
Wk23 2000-06-05	0.00	209270.93	100.10	30542.02	7.89	97302.21
Wk24 2000-06-12	0.00	56008.93	101.35	15117.32	25.80	62757.88
Wk25 2000-06-19	0.00	248741.58	104.47	49076.31	6.46	96316.30
Wk26 2000-06-26	0.00	168886.02	55.41	19722.24	3.80	52603.92

Σ 0.00 973340.73 456.53 160536.81 51.91 407465.90

Sample date: [2000-05-29] Sample Nr: [1] Nr of samples: [5]

Alarm Tube 2: WHC: BTM Elevator: Timeout

FIG. 11